

## **SUCCESS CENTER: Strenthening Math Skills**

## **BASIC STUDY SKILLS**

The same study skills needed to succeed in other classes apply to mathematics as well:

- Attend every class. Arrive 5-10 minutes before class begins. Listen attentively, take notes by hand.
- Make sure you can log into Blackboard and MyMathLab. Drop by the Success Center for SWIC technology help.
- **Ask questions**. If you still don't understand, write questions down to ask after class. Ask the teacher or visit the **Success Center**.
- Start memorizing formulas and their applications after each class and test yourself daily with flashcards (write the formula on one side and the meaning or use on the other side). Meet with a Success Center Learning Specialist or tutor to learn effective strategies for memorizing information.
- Schedule 2-3 hours of study OUTSIDE of class for each hour IN CLASS.

If your Math class is 4-credit hours, plan to spend 8-12 hours OUTSIDE of class each week completing assignments. If your math course is 5-credit hours, plan to spend 10-15 hours of study each week.

- Read the syllabus and write test dates and other class requirements in your planner.
  - For help setting up your student planner or phone calendar, the Success Center will help you get started.

## IMPROVING MATH SKILLS AND TEST TAKING TIPS

- Complete your assignments each day, even if they are not graded.
- Divide lengthy assignments into several 30-45 minute sessions rather than completing the work in one long sitting.
- **Keep a positive mindset** and avoid negative self-talk.
- Determine WHAT the question is asking and WHY you perform a specific operation.
- For word problems, analyze and make a picture before you start your work.
- Translate the wording into a numeric equation, and vice versa. For example, the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides can be written as:  $c^2 = a^2 + b^2$ .
- Neatness makes it easier to recheck your work.
- Look for key words:

+, sum, increase, total = ADDITION	-, less than, reduced, difference = SUBSTRACTION
X, of, times, multiplied by = MULTIPLICATION	÷, per, out of, ratio of, quotient of, percent = DIVISION

- Complete practice tests under the same conditions as you will take the test. Use time drills with a study partner.
- Scan the entire test, prioritize items on the test, and pace yourself. Read the problem part by part, not all at one time. Make sure you understand each part before moving on, and answer the question that is being asked.
- Complete the easiest questions first.
- Estimate what the answer might be so that you have a general idea of what your final answer should be.
- **DO NOT SKIP STEPS**. Start from the beginning and write out each step.
- **Double check your calculator work** immediately. Write down your first answer to compare to the re-check.
- If calculators are *not* permitted, **check your work by performing the opposite operation**. For example, if you are asked to multiply, check your work by dividing.
- If you get stuck on a problem, mark it on the test or scratch paper as a reminder to come back to it later.

Bring your graded quizzes and tests to the Success Center and work with a tutor to correct any errors and understand why the mistakes were made.

## Sources:

Brown, Peter C., Roediger, Mark A., & McDaniel Henry L. *Make it Stick: The Science of Successful Learning*. Cambridge: The Belknap Press of Harvard University Press, 2014.

"Preparing for and Taking Math Exams." Testing with Success Series, Study Guides and Strategies, http://www.studygs.net/tsttak6.htm. Accessed 16 Jun. 2017.